

AMENDMENTS TO THE CLAIMS

1 (Currently amended). An insulating ceramic composition comprising:
a first ceramic powder ~~including~~ comprising forsterite as a main component;
a second ceramic powder ~~including~~ comprising at least one ceramic powder
selected from the group consisting of a calcium titanate-based ceramic powder mainly
containing calcium titanate, a strontium titanate-based ceramic powder mainly
containing strontium titanate, and a titanium oxide-based ceramic powder mainly
containing titanium oxide; and

borosilicate glass powder,

wherein the borosilicate glass contains 3 to 15 percent by weight of lithium in
terms of Li_2O , 30 to 50 percent by weight of magnesium in terms of MgO , 15 to 30
percent by weight of boron in terms of B_2O_3 , 10 to 35 percent by weight of silicon in
terms of SiO_2 , 6 to 20 percent by weight of zinc in terms of ZnO , and 0 to 15 percent by
weight of aluminum in terms of Al_2O_3 .

2 (Original). The insulating ceramic composition according to Claim 1, wherein
the borosilicate glass powder content is 3 to 20 percent by weight.

3 (Original). The insulating ceramic composition according to Claim 1, wherein
the first ceramic powder content is 70 percent by weight or more, and the second
ceramic powder content is 6 to 30 percent by weight.

4 (Currently amended). The insulating ceramic composition according to Claim
1, further comprising a third ceramic powder including at least one ceramic powder
selected from the group consisting of a copper oxide-based ceramic powder mainly
containing copper oxide (CuO), an iron oxide-based ceramic powder mainly containing

iron oxide (Fe_2O_3), and a manganese oxide-based ceramic powder mainly containing manganese oxide (MnO_2),

wherein the third ceramic powder has a total content of 2.5 parts by weight or less relative to 100 parts by weight in total of the first ceramic powder, the second ceramic powder, and the borosilicate glass powder and a copper oxide-based ceramic powder content of 0.5 parts by weight or less, an iron oxide-based ceramic powder content of 1 part by weight or less, and a manganese oxide-based ceramic powder content of 2 parts by weight or less, ~~relative to 100 parts by weight in total of the first ceramic powder, the second ceramic powder, and the borosilicate glass powder while the total third ceramic powder content is 2.5 parts by weight or less.~~

5 (Original). The insulating ceramic composition according to Claim 1, wherein the borosilicate glass has a composition from which a $\text{Li}_2(\text{Mg}, \text{Zn})\text{SiO}_4$ crystal phase can be separated.

6 (Original). The insulating ceramic composition according to Claim 1, wherein the forsterite has a MgO/SiO_2 molar ratio in the range of 1.92 to 2.04.

7 (Original). The insulating ceramic composition according to Claim 6, wherein the first ceramic powder contains 5 percent by weight or less of impurities apart from the forsterite.

8 (Original). The insulating ceramic composition according to Claim 1, wherein the first ceramic powder has a center particle size D50 of 1 μm or less.

9 (Original). The insulating ceramic composition according to Claim 1, wherein the second ceramic powder contains the strontium titanate-based ceramic powder and the titanium oxide-based ceramic powder.

10 (Original). The insulating ceramic composition according to Claim 9, wherein the strontium titanate-based ceramic powder content is 6 to 13 percent by weight and the titanium oxide-based ceramic powder content is 0.5 to 5.5 percent by weight.

11 (Original). The insulating ceramic composition according to Claim 1, wherein the second ceramic powder contains the strontium titanate-based ceramic powder, and the strontium titanate has a SrO/TiO_2 molar ratio in the range of 0.92 to 1.05.

12 (Original). The insulating ceramic composition according to Claim 11, wherein the strontium titanate-based ceramic powder contains 1 percent by weight or less of impurities apart from the strontium titanate.

13 (Original). The insulating ceramic composition according to Claim 11, wherein the strontium titanate-based ceramic powder has a specific surface area of 1.5 to $7.5 \text{ m}^2/\text{g}$.

14 (Original). The insulating ceramic composition according to Claim 11, wherein the strontium titanate-based ceramic powder exhibits an X-ray diffraction pattern having a peak of the SrTiO_3 (222) plane with an integrated intensity of 1000 or more.

15 (Currently amended). A insulating ceramic sintered compact ~~prepared by firing the~~ comprising a insulating ceramic composition ~~as set forth in any one of claims 1 to 14 at a temperature of 1000°C or less~~ according to claim 1.

16 (Currently amended). A monolithic ceramic electronic component comprising ~~[[:]]~~ a plurality of stacked insulating ceramic layers according to, ~~the insulating ceramic layers, each comprising the insulating ceramic sintered compact as set forth in Claim 15; and a wiring conductor comprising~~ conductors mainly containing copper or silver associated therewith, ~~the wiring conductor being formed in association with the insulating ceramic layers.~~

17 (Currently amended). The monolithic ceramic electronic component according to Claim 16, further comprising a highly dielectric ceramic layer having a relative dielectric constant of 15 or more layers stacked ~~together with the~~ an insulating ceramic layer layers, ~~the highly dielectric ceramic layers having a relative dielectric constant of 15 or more.~~

18 (Currently amended). The monolithic ceramic electronic component according to Claim 16, wherein the highly dielectric ceramic layers comprise a highly dielectric material containing:

a main constituent expressed by $x(\text{Ba}_a\text{Ca}_b\text{Sr}_c)\text{O}-y\{(\text{TiO}_2)_{1-m}(\text{ZrO}_2)_m\}-z\text{Re}_2\text{O}_3$ (wherein x, y, and z are in mol% and satisfy $x+y+z = 100$; $a+b+c = 1$, $0 \leq b+c < 0.8$, and $0 \leq m < 0.15$ hold; and Re represents at least one of rare earth elements), containing $(\text{Ba}_a\text{Ca}_b\text{Sr}_c)\text{O}$, $\{(\text{TiO}_2)_{1-m}(\text{ZrO}_2)_m\}$, and Re_2O_3 in a molar ratio (x, y, z) lying in an area surrounded by lines connecting points A(7, 85, 8), B(7, 59, 34), C(0, 59, 41), and D(0, 85,

15) in a the ternary diagram shown in Fig. 3 attached (but not lying on the line connecting points A and B [()]);

a first accessory constituent including SiO₂-based glass; and

a second accessory constituent containing Mn,

wherein the highly dielectric material contains 0.1 to 25 parts by weight of the first accessory constituent and 0.5 to 20 parts by weight of the second accessory constituent in terms of Mn, relative to 100 parts by weight of the main constituent.

19 (Original). The monolithic ceramic electronic component according to Claim 18, wherein the highly dielectric material further contains Li₂O.

20 (Original). The monolithic ceramic electronic component according to Claim 16, wherein the highly dielectric ceramic layers comprise a highly dielectric material containing:

a BaO-TiO₂-ReO_{3/2}-based ceramic composition expressed by xBaO-yTiO₂-zReO_{3/2} (wherein x, y, and z are in mol% and satisfy $x+y+z = 100$; $8 \leq x \leq 18$, $52.5 \leq y \leq 65$, and $20 \leq z \leq 40$ hold; and Re represents at least one of rare earth elements); and

a glass composition containing 10 to 25 percent by weight of SiO₂, 10 to 40 percent by weight of B₂O₃, 25 to 55 percent by weight of MgO, 0 to 20 percent by weight of ZnO, 0 to 15 percent by weight of Al₂O₃, 0.5 to 10 percent by weight of Li₂O, and 0 to 10 percent by weight of RO (wherein R represents at least one selected from among Ba, Sr, and Ca).

21 (New). The monolithic ceramic electronic component according to Claim 18, wherein the highly dielectric ceramic layers have a relative dielectric constant of 15 or more and contain Li_2O , and wherein a highly dielectric ceramic layer is sandwiched between adjacent layers of fired insulating ceramic layers.

22 (New). The insulating ceramic composition according to Claim 3, wherein the borosilicate glass powder content is 3 to 20 percent by weight, contains lithium in an amount of 4 to 10 percent by weight in terms of Li_2O , 30 to 45 percent by weight of magnesium in terms of MgO , 15 to 25 percent by weight of boron in terms of B_2O_3 , greater than 0 up to 10 percent by weight of aluminum in terms of Al_2O_3 , and has a composition from which a $\text{Li}_2(\text{Mg}, \text{Zn})\text{SiO}_2$ crystal phase can be separated; the first ceramic powder has a center particle size D50 of 1 μm or less and contains at least 95 percent by weight of forsterite having a MgO/SiO_2 molar ratio in the range of 1.92 to 2.04; and the second ceramic powder contains 0.5 to 5.5 percent by weight of titanium oxide-based ceramic powder content and 6 to 13 percent by weight of strontium titanate-based ceramic powder having a SrO/TiO_2 molar ratio in the range of 0.92 to 1.05 and 1 percent by weight or less of impurities and a specific surface area of 1.5 to 7.5 m^2/g and exhibiting an X-ray diffraction pattern having a peak of the SrTiO_3 (222) plane with an integrated intensity of 1000 or more.